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Calendar of events

TO ADD AN EVENT TO THE CALENDAR PAGE, PLEASE SEND DETAILS TO THE EDITOR, sanjoy.bhattacharya@ucl.ac.uk

JANUARY 2008

5 **Medicine and History: Good and bad**
Prof. Alex Markham, 'Genes, Genetics and History'
and Dr Val Heatley, 'Guts, Gas and Gaiters'
Thackray Museum, Leeds
Contact: info@thackraymuseum.org

9–10 **Second International Conference in the History of Medicine in Southeast Asia: Treating diseases and epidemics in Southeast Asia over the centuries**
Universiti Sains Malaysia, Penang, Malaysia
Contact: shakila@usm.my

18–19 **Infectious Diseases and Institutions: The Robert Koch Institute in international perspective, 1930–1950**
Berlin
Contact: Volker Hess (**E** volker.hess@charite.de)

24–25 **Medicine in the Balkans: Evolution of ideas and practice to 1945**
Symposium, Royal Asiatic Society, London
Contact: Carol Bowen (**E** c.bowen@ucl.ac.uk)

FEBRUARY 2008

2 **Medicine and History: Good and bad**
Dr Michael Martin, 'Rheumatoid Arthritis: From prehistory into the 21st century' and Prof. Rosalie David, 'Ancient Egyptian Mummies and Modern Science'
Thackray Museum, Leeds
Contact: info@thackraymuseum.org

MARCH 2008

1 **Medicine and History: Good and bad**
Prof. John Cummings, 'Probiotics: Good bacteria for better health'
and Prof. Mark Jackson, 'The Allergy Epidemic: Fact or fiction?'
Thackray Museum, Leeds
Contact: info@thackraymuseum.org

12–14 **Second International Conference on Nursing History**
Institut für Geschichte der Medizin, Stuttgart
Contact: sylvelyn.haehner@igm-bosch.de

28–29 **Sports, Medicine and Immortality: From ancient China to the world wide web**
Conference, The British Museum and Queen Mary University East London
Contact: Carol Bowen (**E** c.bowen@ucl.ac.uk)

APRIL 2008

14 **The Origins of the NHS**
Lecture by Prof. Virginia Berridge
Gresham College, London
Contact: enquiries@gresham.ac.uk

JULY 2008

4–5 **Who Cared? Oral history, caring, health and illness**
Oral History Society Annual Conference, in association with the Centre for the History of Medicine, University of Birmingham Medical School
Contact: R.G.Arnott@bham.ac.uk

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ISSUE 36 **WINTER 2007**

FEATURE ARTICLE 2
Politics and culture of medicine in Meiji Japan
WORK IN PROGRESS 4
Chinese occult texts
Transnational herbal medicine
Livingstone Online
Cadaver use in Turkey
Disease and pilgrimage in India
Refugee scientists at UCL
Sanskrit gynaecologies
Animals and 'one medicine'
GLASGOW CENTRE 16
CONFERENCE REPORT 18
Early modern anatomy representations
BOOK REVIEWS 20
CALENDAR 24

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The body in question

The politics and culture of medicine in Meiji Japan, 1868–1912

SUSAN L BURNS

In 1868 Japan experienced a political revolution when the Tokugawa bakufu was overthrown, and a new government headed, at least symbolically, by the Meiji emperor took form. In the aftermath of this 'restoration', as it was termed, the new Japanese state began a process of 'nation-building' with the goal of preserving Japan's sovereignty from the threat of Western imperialism.

For Japan's new leaders, the health of the citizenry quickly became an object of profound political concern. The forced 'opening' of the country in the 1850s had brought not only political and economic turmoil but also an epidemiological crisis as cholera and other acute infectious diseases were introduced to Japan, sparking a series of devastating epidemics that continued into the early 20th century. After 1868, as the new government became involved in the compilation of statistically produced indices (including rates of contagious disease, disability and infant mortality), these were interpreted as evidence of Japanese weakness vis-à-vis the West. Consequently, governmental policy came to be oriented around the notion that the improvement of health was necessary to create the large and healthy population that would make Japan a prosperous and powerful nation.

To this end, the Meiji government began to exercise authority over medical knowledge, practices and institutions. New medical schools and a system of state licensing led to the promotion of so-called 'Western medicine' over traditional forms of medical practice. Well-established forms of treatment such as acupuncture, moxibustion and massage came to be regarded as ineffective or positively dangerous in contrast with 'scientific' medical practices. Policing and confinement became the primary means to deal with the danger posed by infectious disease. Individual physicians were charged with reporting cases of infection to the local police, and quarantine hospitals were created for those struck down by acute infectious diseases such as cholera and typhus. Lock hospitals were established to house prostitutes who suffered from syphilis, as were asylums for the mad and sanatoria for indigent sufferers of leprosy. A host of new regulations were issued governing such things as the construction of privies and wells, funerary practices, and the handling of foodstuffs in markets and eateries. Simultaneously, government campaigns addressed individual behaviour, encouraging people to eat bread and drink milk, to adopt Western hairstyles and clothes, to use soap and toothpaste, and to cease the blackening of teeth – all in the name of promoting health and hygiene.

Above: Disposal of the dead in a cholera epidemic in Japan. By Charles Edwin Fripp, after Meisenbach.

Cover: Japanese funeral costumes. Watercolour, *c.*1880.

Prominent journalists attacked the drug trade as a dangerous waste of resources, both human and material

This process of institutional change has been well documented by Japanese historians in the fields of the history of medicine and social history. What has not been explored adequately is the fundamental reordering of the sociocultural understanding of sickness and health – of the body and the practices to which it was subject – that the new medical discourses and their related institutions required. My research has focused on exploring cultural and intellectual responses to the rapid and authoritarian establishment of 'Western medicine', which required the disestablishment of early modern conceptions of body and the practices associated with it. This process was neither smooth nor easy, but rather led to a series of confrontations between the government and the people of Japan over the question of 'whose body is it?' – a question that came to involve issues of individual and social needs, personal freedom and the public good, charity and control. The government in its valorisation of the new medical system made reference to notions of utility, efficiency and social benefit. However, policy implementation required a popular consensus not only on what these terms meant, but also on the meaning of sickness and health in social, cultural and political terms.

In exploring this struggle over the body, three issues are deserving of focus. The first concerns the reception of Western medicine and the displacement of early modern theories of the body. The establishment of the new medical system required its popular acceptance, and this did not come easily. An example of popular resistance can be seen in the struggle of the new psychiatric profession to establish 'brain disease' as the cause of insanity by disavowing the notion of possession by foxes and other animal spirits. This new way of explaining madness, idealising the notion of a singular and enduring identity, was deployed against the early modern conception of the body as a potential site of multiple consciousnesses. The result was the production of a subject who could be defined – legally, administratively – by the corporal boundaries of the body. The assault on the early modern conception of madness soon took the form of specific kind of practice: fieldwork investigations wherein doctors from the emergent psychiatric establishment travelled to the countryside. There, with the help of local officials and physicians, they subjected those afflicted to interviews and examinations, thereby bringing them physically under the authority of the new theory of madness. What is striking in the published accounts and field notes of these expeditions is the difficulty the doctors and officials encountered: local families hid their afflicted members, refused to cooperate with the interview process, and questioned the diagnosis. However, by the end of the Meiji era this kind of resistance seems to have disappeared, and in fact the language of the psychiatry – terms such as 'hysteria' and 'melancholia' – appears in advertising copy for patent medicines and in pulp fiction about troubled youths. My work traces the relationship between the dual processes of 'translation' and 'diffusion' in order to explore how the new medical discourse entered into popular culture.

The second issue concerns the popular understanding of the institutions that were the apparatus of the new medical system. The notion that confinement and isolation were proper responses to illness was a radical break with the early modern practices of dealing with sickness and disease, and thus in the first decades of the modern period, attempts to sequester the afflicted met with popular resistance. The new laws requiring the isolation of those stricken by acutely infectious diseases led to a series of uprisings in which quarantine hospitals were ransacked and public health officials and doctors set upon by angry mobs. It is clear that even by the third decade of the Meiji era, hospitals, asylums and sanatoria had not yet been rendered commonplace, for beginning around the turn of the century Japan's newspapers and literary journals, as well as its bookstores, came to be filled with texts that attempted to speak of and from these institutions. This 'literature of the hospital', as I term works such as Ozaki Kôyô's *Record of a Sick Body* (*Byôkotsu Roku*, 1905) and Kunikida Doppo's *Record of the Sickbed* (*Byôshô Roku*, 1910), can be used to explore the varied meanings that were attached to the experience of sickness and disease within the new medicalised culture that took form in the late 19th century.

Policing and confinement became the primary means to deal with the danger posed by infectious disease

The third theme deserving of attention is the relationship between medical discourse and the emergent consumer culture. As health was being redefined as a requirement for full participation in national culture, the new medical and public health elite became increasingly concerned about the theretofore-unregulated trade in patent drugs. Beginning in the 1870s, the government issued laws regulating the advertisement of patent drugs, taxing producers heavily, and requiring that retail shops and peddlers purchase licences. During this same period, prominent journalists, among them Fukuzawa Yukichi, attacked the drug trade as a dangerous waste of resources, both human and material, that Japan could ill afford. However, even in the face of this kind of criticism and the increasingly onerous web of government regulation, the trade in drugs and hygiene products grew substantially over the course of the late 19th century. Through the analysis of print and other advertisements, the producers and retailers of these products skilfully negotiated the tensions that emerged in relation to the state-sponsored project of improving the health of Japan's citizens. Advertisements for drugs that promised to cure syphilis, leprosy and tuberculosis, to improve fertility and virility, and to promote mental clarity and physical vigor encouraged potential customers to embrace the idea that health was a civic duty, while offering them the opportunity to escape the scrutiny of physicians and public health officials.

Through the exploration of these three issues, my work reveals that the people of Japan were not passive before the vision of the 'national body' that oriented state medical and public health policy. By means of the works they wrote and read, the products they bought and used, and the language they deployed, Japan's citizens succeeded in both assimilating and at times subverting the state discourse on health and disease.

Professor Susan L Burns is attached to the University of Chicago, USA, (**E** slburns@uchicago.edu).

Occult texts and everyday knowledge in China in the age of manuscripts

DONALD HARPER

It was fortuitous in 1900 when an itinerant Daoist master, Wang Yuanlu, unblocked the entrance to a small cave near Dunhuang, Gansu, to reveal a cache of medieval paper manuscripts and a few woodblock printings – most in the form of scrolls, booklets and individual sheets – that had not been seen since the cave was sealed in the early 11th century.

Chance events and archaeology also led to the 20th-century discovery of ancient manuscripts – bound rolls of bamboo or wooden slips, single wooden tablets and silk sheets – with tombs from the fourth to first centuries BCE providing an especially rich assortment. The number of ancient manuscripts continues to rise with fresh excavations. Manuscripts, ancient and medieval, are alive with the materiality that they possessed for the Chinese who made and read them. Both the elegant production in fine calligraphy and the roughly executed copy manifest the circumstances in which written texts entered into people's lives. The content shows us exactly the text that they read, flaws included, not a text that was later edited, standardised or recast in a printed edition, as is typical for texts that have been transmitted down the centuries – the 'received texts' that are basic sources for our understanding of ancient and medieval Chinese culture. Moreover, manuscripts give us texts that were not transmitted, and these 'un-received texts' can alter the historical picture formed from received texts; or perhaps it is more accurate to say that these texts allow us to fashion one of several representations that form a composite image of the culture that embraced them.

Right: Straw figures for the 'transplantation' of demons from sick people.

My book will be about ancient and medieval Chinese manuscript copies of occult texts. The designation 'occult' is mine and I adopt it for several reasons. As a term of bibliographic classification 'occult' substitutes for *shushu* ('calculations and arts'), the name given to the division of books on astrology, the calendar, and various forms of divination and magic in the first-century BCE catalogue of the library of the Han dynasty ruling house. In ancient and medieval China *shushu* also designated ideas and practices that in English are considered 'occult', referring to "knowledge or use of agencies of a secret and mysterious nature" (*Oxford English Dictionary*).

The manuscript texts to be presented all share the premise that such agencies are part of everyday reality. The texts record knowledge people needed for daily life: to anticipate good fortune or misfortune; to interpret signs or to respond when affected by unexpected activities of the hidden world; to tap powers or agencies for personal benefit; or perhaps simply to satisfy the curiosity for knowledge. The oldest manuscript is fourth-century BCE, found in the tomb of an unidentified ordinary man (archaeologically speaking) in a cemetery at a site near present-day Jiudian, Hubei, in the region of the ancient state of Chu; the youngest are tenth-century CE Dunhuang manuscripts, several of which include the name of the copyist. Few texts have titles, many are fragmentary, and with several exceptions the texts were unknown before the manuscript discoveries of the 20th century. Yet in aggregate the texts are vivid evidence of the place of occult ideas and practices in the lives of the literate elite who read them, and they embody occult knowledge as written knowledge to be enacted from texts. I am most concerned to situate the occult texts precisely within the manuscript culture of ancient and medieval Chinese elite society, and to mine the texts for information about the everyday reality of which they too were constituent parts. Historical sources and other received texts are indispensable to this project.

However, I purposely do not give priority to a historical frame of reference derived from received sources. Rather, I wish to have the manuscripts and occult texts reveal their own qualities, and to let them be a source of fresh perspectives. For example, I have little to say about accounts of *fangshi* ('recipe gentlemen') in historiography of the Han period (206 BCE–220 CE), even though the sources portray *fangshi* as wonder-workers and charlatans who first caught the eye of the elite in the third and second centuries BCE with their occult knowledge and feats of magic, and indicate tensions between *fangshi* values and *ru* ideology (state-sponsored orthodoxy associated with Confucius). We can be sure that individuals identified as *fangshi* produced texts, but what facts Han historiography provides about *fangshi* simply do not explain the place of occult texts in Han and earlier manuscript culture.

Diviners, astrologers and religious specialists are equally obvious exponents of occult knowledge committed to writing. However, it is clear from the ancient and medieval manuscript texts that their content addressed the desire of an elite readership for occult knowledge. Similarly, this book focuses on the non-specialist elite, who had recourse to specialists and could obtain occult literature. Texts provided them with information on spirits, astrology, divination systems, efficacious magico-ritual practices and other knowledge that they put to use in daily life. Text-based occult knowledge did not diminish the demand for specialists, yet texts acquire their own existence as they are copied and transmitted, and the cachet of occult texts shaped elite views of occult knowledge in ways that specialists did not. Occult texts were also the receptacle for knowledge of such ordinariness as to invite the modern label 'folklore' (recent studies tend to highlight this aspect of the texts). Occult texts bring us closer to popular ideas and practices than most sources, with a caveat: we must first treat the texts as the embodiment of occult knowledge in a text-based tradition, and then look for folklore.

Occult literature as one expression of everyday knowledge is not unique to ancient and medieval China, and study of the Chinese manuscript texts clarifies issues in cultural studies beyond the case of China. For literacy, the Chinese occult texts are evidence of a grassroots cultural textualism – a reliance on written texts in the conduct of life – that has a counterpart in 15th- and 16th-century Europe, when popular occult books written in vernacular language flourished along with the introduction of paper and printing. If elite culture tended to idealise certain texts – in China, the *jing* ('canons') – then occult texts reveal more of the mechanics of how texts entered into people's lives. For thought and religion, Chinese occult texts mediated between specific ideological programmes – philosophical speculation on processes in nature and human society, or ideas and practices in Daoist religion and Buddhism – and intrinsic responses to everyday reality by both elite and non-elite in society. Popular, non-textual culture is always at work, but occult texts are evidence of interchange and adaptation occurring between one text-based body of knowledge and another.

Donald Harper PhD is Professor in East Asian Languages and Civilizations at the University of Chicago, USA (**E** dharper@uchicago.edu).

Regulating nature: herbal medicine in a transnational context

WEN-HUA KUO

My research examines how East Asian states are engaging and transforming biopharmaceutical enterprises in a transnational context.

Specifically, my recently completed dissertation analyses the history of pharmaceutical regulation and how the International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH) is confronting the age-old issue of ethnic difference. A bold project that aims to create universal standards for clinical trials and drug approvals, the ICH is a salient example of the diversity of regulatory cultures regarding the making of universal standards.

Analysing how ethnic difference should be evaluated in clinical trails, I demonstrate the discrepancy between

Right: Preparing a herbal prescription in the China Medical College Hospital, Taichung, Taiwan.

Mark de Fraeye

Japan's and Taiwan's responses to the ICH: while Japan emphasises ethno-racial identity, Taiwan downplays these considerations in favour of the nation's world recognition. These two Asian states' regulatory reforms, I argue, indicate a larger phenomenon when we deal with modern medicine: institutional characters shaped by history and tradition, and the notion of the nation-

state, continue to play a crucial role in modulating the global spread of Western biomedicine. This argument also forms the problematic in my current project on the transformation of herbal medicinal policy.

By complementing current literature on the history of traditional medicine in East Asia, my study is an institutional or governmental one that focuses on the development of policy initiatives on the modernisation of herbal drugs. It tries to establish an understanding of the variety of ways that Asian states regulate their natural resources, biotechnology, culture and modern medicine, and how these states make transnational standards through their scientific agendas. In the following I highlight two transnational trends that tie my argument to the subjects I am working on.

The first trend is the USA's increasing interest in the regulation of botanical drugs. Since the Food and Drug Administration (FDA) announced its standpoint on the regulation of botanical drugs in 1998 and revised it in 2004, herbal medicine has been revived and has become a focus for Asian countries trying to catch up with Western industry. It seems that, beyond being purely consumers, Asian states can attract the world's major markets with their traditional wisdom of cures. Even so, this approach meets problems. Although East Asia has a long history of using herbs, this does not mean that the USA would accept Chinese medicine, which features complex compositions and vague indications, with no reservations. Insisting that there should be a universal standard for pharmaceuticals, it would be almost impossible to approve any herbal medicine under the FDA's current regulations.

The wish to promote herbal medicine is one that mixes desires to conquer the global market and to reclaim China's national pride

Compared with negotiating for the FDA's recognition of Chinese medicine, creating an integrated market for those who appreciate the value of these kinds of drug is a more viable and convincing goal. This is the second trend I observe among East Asian states. Again, however, regulation is the key to this task. How do these Asian countries reconcile their traditional medical wisdom with the Western style of regulation? Contrasted with the regulation of synthetic biomedical pharmaceuticals, how can these countries establish a network of botanical medicine stretching from the fields of raw materials to the benches of molecular biology and into clinical centres? Finally, on the global level, to what extent can the ICH's experience provide a model for the various international pharmaceutical initiatives among these Asian countries?

Although all are in their preliminary stages, I have developed several 'working sites' considering the national

differences in East Asian countries' regulatory cultures on traditional medicine. Let me start with Japan's regulation on *kampo* (the general term for traditional medicine). Hugely influenced by its Chinese origin, and legally abolished when Meiji's Government moved toward modernisation, *kampo* is usually considered an insignificant deviation of Chinese medical thoughts, or an Edo legacy that has waned and been replaced by synthetic pharmaceuticals. Yet, these statements fail to explain why *kampo* drugs still are welcomed and popular today, without the state's sanction. Some *kampo* drugs remain available in proscriptive repertory; meanwhile, in the over-the-counter drug market, where most products claim to have *kampo* components, the volume of consumption is quite large.

Can the cultural conception of the Japanese race play a role in explaining this phenomenon? Perhaps. Japan is famous for its insistence on the uniqueness of its bodily composition, and *kampo*'s popularity seems to fit this cultural imagination: what remedy can cure a Japanese body better than Japan's own traditional medicine? But questions arise if we view *kampo* as a purely racial science. For instance, why does the Japanese Government hesitate to grant *kampo* a legal position, while acupuncture and moxibustion, which belong to the same therapeutic tradition as *kampo*, have not been abolished by traditional medicine? All this requires a historical understanding of *kampo*'s regulation during the period of Japan's modernisation.

Unlike Japan's attitude toward its traditional medicine, Taiwan, my second working site, grants Chinese medicine legal status under a cultural scheme that parallels everything Chinese to that which is Western. This 'dual system' worked well even after the introduction of national health insurance. Like their

Above:
Herbal medicine stalls in Taiwan.
Mark de Fraeye

colleagues who are trained in biomedicine, traditional Chinese medicine (TCM) practitioners are reimbursed and TCM research wins government support. The 'meltdown' of this system started with a regulatory 'scratch' that hoped to create sound standards for reviewing herbal drugs other than remedies listed in Chinese classics. Can the Center for Drug Evaluation, the Taiwanese regulatory authority on drugs of all kinds, create such standards that serve this scientific merit while maintaining herbal medicine's 'Chinese' characteristics? Moreover, even if such standards exist, can Taiwan make other countries follow its regulations, helping Taiwan to promote its bioproducts across national borders?

My project cannot be completed without studying China, the world's major resource for herbal medicine. In addition to its efforts in investigating and preserving its natural sources, the Chinese Government has launched several national projects that attempt to provide TCM with evidence justifiable by Western standards. Simultaneously, following its diplomatic and financial connections with other Asian counties, China is eager to take the lead in the standardisation of Chinese medicine.

On the surface, these works do not differ from those undertaken by other Asian states. From a historical perspective, however, I would like to examine the cultural and political motivations behind these actions. Like the movement of 'integrative medicine', which was launched immediately after the foundation of the People's Republic of China, the wish to promote herbal medicine is a complicated one that mixes desires to conquer the global market and to reclaim China's national pride.

As it unfolds, this project will work on a transnational scale and with a strong concern for how culture and society shape how medicine is expressed. My work is not intended solely to analyse the efforts to establish standards for herbal medicine. In addition, I hope to call attention to how globalisation affects traditional medicines, and how these traditions, which have been shaped differently through regulations administered by local institutions, develop distinct strategies and global visions for their futures.

Dr Wen-Hua Kuo MD PhD is an Instructor at the Institute of Public Health and Department of Social Medicine, National Yang-Ming University, Taiwan.

Livingstone Online

CHRISTOPHER LAWRENCE

Livingstone Online is a new venture based at the Wellcome Trust Centre for the History of Medicine at University College London.

The website (**www.livingstoneonline.ucl.ac.uk**) makes available the first scholarly online edition of the medical and scientific correspondence of David Livingstone (1813–1873), the missionary, explorer, naturalist and doctor. The site will also include some of his manuscripts and published papers. Livingstone Online is publishing fully annotated transcripts and facsimiles of his letters and other documents. The Wellcome Trust has awarded Livingstone Online a three-year project grant to realise its goals.

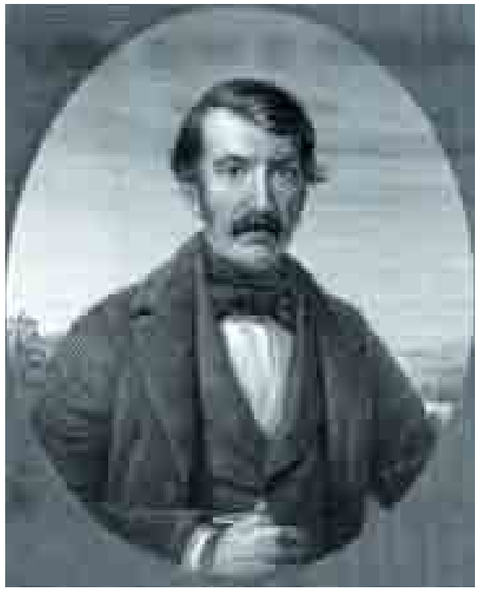
Together, the variety and range of Livingstone's papers constitute a unique historical and interdisciplinary resource. Over 2000 letters survive, covering a vast range of subjects. Their contents include family and religious matters, observations on African customs, geography and the slave trade, and a great deal relating to the details of the organisation of expeditions. A large number of his letters contain material on science (notably astronomy and meteorology) and medicine. Natural historical accounts of flora and fauna are prominent. Medical matters include both clinical observations and

Right:
David Livingstone's medicine chest.

descriptions of African culture and geography in the Hippocratic *Airs, Waters and Places* tradition. Livingstone was seeking out healthy areas suitable for European settlement. A great number of the letters reveal the politics and social life of British scientific societies (notably the Royal Geographical Society) and other institutions, such as universities, in the 19th century.

Livingstone's surviving letters are scattered across the world. There is no one collected edition. All letters written by Livingstone, along with his other writings that were known before 1985, have been listed in G W Clendennen and I C Cunningham's *David*

Livingstone: A catalogue of documents (Edinburgh: National Library of Scotland; 1979) and Cunningham's *David Livingstone: A catalogue of documents: a supplement* (Edinburgh: National Library of Scotland; 1985). A few letters have been discovered since then and others may exist. Many letters are known only as copies of originals. Some exist only in printed form. Letters to Livingstone have not yet been catalogued.



Above: David Livingstone, 1876.

Livingstone material is located in over 80 archives and libraries, and other material is in undesignated private hands. However, the bulk of the letters is held in a small number of institutions in Britain and Africa. Of these, the National Library of Scotland (NLS) has impressive holdings, including a large (although not comprehensive) number of copies of letters held elsewhere. The NLS has a substantial number of letters to the doctor and botanist John Kirk, and its holdings have recently been increased by the acquisition of the John Murray Archive. This collection, from the John Murray publishing house, contains more than 150 000 letters by a variety of individuals, including many by Livingstone. The British Library and the School of Oriental and African Studies at the University of London also have important collections. In Africa the National Archives of Zimbabwe and the Livingstone Museum in Zambia are institutions with sizeable holdings. There are also letters in South African libraries.

Livingstone Online already makes available detailed transcriptions and high-quality images of the Wellcome Library's collection of Livingstone letters and some of correspondence from the NLS. The Wellcome Library's letters were bought during the last years of Henry Wellcome's lifetime when Livingstonia were highly marketable as collectibles. Unfortunately, little is known of their earlier provenances. Written in the period 1841–65, these letters were addressed to a variety of correspondents, including Sir Richard Owen, Sir Roderick Impey Murchison and Sir James Risdon Bennett.

With the Wellcome Trust funding we will concentrate further on letters in the NLS but are already scanning, transcribing and editing letters in other institutions, notably the David Livingstone Centre at Blantyre and the Royal Geographical Society of London. We also aim to release a database version of Clendennen and Cunningham's works. We would appreciate hearing from anyone knowing of any newly discovered Livingstone material.

Christopher Lawrence is Director of Livingstone Online and Professor Emeritus at UCL.

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'Less-than-profane'

ASLIHAN SANAL

A history of the commodification of the body for medicine begins in anatomy. Transplantation and allografting, however, bring this commodification process from the sacred world of the dead to the profane world of the living.

As such, history of the undone body composes a continuous record for medicine, a history in itself, that illuminates not only how the cadaver has been invented within certain social groups, but also how socially marginalised living bodies are made into commodities in today's biotechnological life.

In Turkey, as elsewhere, anatomy as a discipline has introduced a liberation from superstitions and taboos surrounding the dead body. This medical emancipation simultaneously marked the beginning of a scientific bondage caused by this discipline's epistemic circumstance: its dependence on the dead body of another and the knowledge excavated from it during dissection. This knowledge produced a discourse among physicians on social change, bodily integrity and political violence in relation to the dead body. It launched a process that shapes anatomy as a discipline and is carried into debates on organ transplantation and trafficking.

Obtaining cadavers for dissection has always been extremely difficult in Turkey. Besides the religious sentiments about resurrection, bodily integrity and flow of burial rituals, anatomists believed that political violence would have marked the body of the cadaver, had they used it for medical education. For these reasons anatomists had to find a pool of donors invisible and insignificant to the common good life: they started using the bodies of the mentally ill who had been abandoned at the mental hospital in Istanbul. Those whose families had not claimed the body within six months of their death were declared *kimsesiz* (one with no kin, homeless), to be used as cadavers. With their bodies emptied out from the kinship ties that linked them to normal life, they could become medical objects. 'Medical homelessness' circumscribed the cadaver and with this legal category physicians were inventing a new – and expanding – community of bodies to be used for social hygiene.

The treatment of the body as a concept that can be emptied out and refilled via technology is analogous to discursive processes. These dissociate the body from its kin and then fill it out by attributing labour to it. Allografting technology is an example of this formation.

Right: Turkish burial ground. By Montagu O'Reilly, 1854.

Turkish companies import grafts from the USA, France, Germany and other countries and categorise these body parts as 'human originating medical materials'. In these companies' eyes, the trading of the bodies of the other is merely a natural extension of this postcolonial trade, no matter how these body parts have been obtained. In the economy of grafts, the foreign bodies are irradiated and cleansed of any virus – in orthopaedists' words, becoming mere matrices for patients all around the world, among them a country such as Turkey with a large Muslim population.

The Muslim world is a big market for grafts, in part for traditional reasons. The body-cleansing ritual in the mosque, where the relatives wash the dead body, pray and wrap it in a shroud, requires a body that looks and feels complete. While one does not feel the absence of internal organs, it is impossible to hold the body together if parts of the skeleton have been harvested. With the import, the dead body of the foreigner becomes an 'inert graft', not only to the body of the patient by harmoniously matching with his or her constitution, but also to the social body as an assimilative object by preventing confrontation with the flow of life, as traditions command. It avoids confrontation with deeper questions of life or death by utilising the other.

Organ transplants are practised in the same realm. The shortage of donations from cadavers in Turkey is dramatic, sometimes dropping to 10 per cent of all transplants, a condition that is the root cause of a dramatic increase in living related transplantation and its extension, organ trafficking. And yet again, the question of the cadaver appears like a dark shadow of which one can catch a glance only in a 'state of exception'. From the world of the dead, transplant surgeons thought, suicides could be a potential donor group that could be drawn into the world of the profane if they were diagnosed with brain death. With the help of Ministry of Religious Affairs a big media campaign was launched in 1998 aiming to encourage families whose loved ones had committed suicide to donate the body for transplants in order to transform the sin of suicide into a good deed, saving patients' lives. This marks the transitional moment from the medical homeless category to the making of a social group that can be emptied out from its organs and sins analogously, to be filled with kindness that is viewed equal to labour, and to proper life.

When cadavers become so scarce, then living related transplants become the main donor group for transplants. The root cause of human body and body part trafficking in Turkey lies here. In between death and the physician, organ trafficking becomes a business of life. Reminiscent of the days of the slave trade, many people, especially the poor, women, people of colour and illegal immigrants become commodities in the international networks of trade. Their bodies are made 'less-than-profane'.

Over, through, and effacing these bodies, the history of the living body continues to be written, recorded as the advance of medicine, and of saving lives.

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Disease and pilgrimage in northern India, 1867–1914

AMNA KHALID

During the 19th century there was a strong correlation between the timing of Hindu pilgrimages in Uttar Pradesh and epidemic outbreaks of cholera and plague in northern India. Every 12 years, as pilgrims returned from fairs at the banks of the Ganges, epidemics would spread in their wake.

My thesis explores this correlation and studies the measures taken by the colonial state to control the spread of disease from large centres of pilgrimage, which were viewed as hotbeds of disease by not only the colonial state but also the international community. There have already been a number of important studies of epidemic diseases in British India, but none has examined in detail the issues surrounding internal pilgrimages. Pilgrimages were among the main concerns of the sanitary and medical authorities in India, as they represented a flashpoint between two opposing worldviews: between the desire of a modernising state determined to control the spread of infectious disease for economic and political reasons, and a subject population that shared few of these concerns.

The colonial state looked upon pilgrimages as a sanitary problem to be managed to prevent the dissemination of diseases such as cholera and plague, while pilgrims and *Pandas* (priests) approached these locations as holy sites of religious significance. The pilgrims preferred their visits to these places to be unfettered by state regulations; the *Pandas*, who considered themselves to be guardians of these places, perceived intervention by the colonial state as an encroachment on their sphere of influence and authority.

The particular focus of this thesis is on two main pilgrimage sites in north India: Hardwar and Allahabad, along the banks of the Ganges. It argues that the idea of pilgrimage is a temporal one and studies how it developed and transformed under colonial rule and grew from an activity undertaken by a small section of society into an important signifier of Hinduism more generally. In so doing it considers the socioeconomic changes of the period under study that worked towards the making of pilgrimage into a mass phenomenon.

Moreover, the thesis analyses the changing nature of pilgrimage over time and its emergence as a community binding indicator and a signifier of nationalism. It examines the manner in which pan-Hindu identity came to be located in the practice of pilgrimage. These issues are explored through a study of the colonial state's intervention to manage epidemics at pilgrimage sites. The thesis argues that these public health measures contributed towards the changing nature of pilgrimage and of the pilgrimage sites.

During the first half of the 19th century the notion of disease being spatially/locally rooted was gaining currency within medical discourse, and attention came to be turned onto pilgrimage sites as epidemics of cholera broke out at large pilgrim gatherings at these locations. This state of affairs was seen as warranting a sanitary overhauling of these locations by the colonial state, which in turn significantly altered the pilgrimage experience as these sites were substantially reordered in line with sanitary principles. Such state intervention resulted in pilgrimage sites becoming contested spaces between the colonial state and the people at large. With controversial measures in the name of public health, such as the breaking up of large pilgrim fairs and the use of force to disperse these congregations, the interference of the state was resented and resisted by the *Pandas* and the pilgrims. This became a particularly sensitive and explosive issue in the latter half of the century after the 1857 rebellion, when the Queen declared that all her subjects were free to practise their religious beliefs without interference from the state. While sanitary measures were actively opposed at times, at others the state came under severe criticism in the local press for not paying enough attention to the sanitary condition of pilgrim fairs, thereby endangering the wellbeing of its Indian subjects. The lack of state-instituted sanitary arrangements at pilgrimage sites was blamed for the cholera epidemics of 1879 and 1892. Thus sanitation assumed a central position in negotiations between people and state where the state's sanitary measures were seen as suspect but essential.

Pilgrimages represented a flashpoint between a modernising state and a subject population

The thesis also investigates the role of subordinate personnel in implementing policy measures. Furthermore it investigates the manner in which those at the lowest rung of the staff responsible for instituting the measures affected the very formulation of policy. This is a particularly understudied aspect of public health in India[1] and therefore a contribution this thesis makes to this field. It focuses on two case studies of subordinate personnel, namely the police force on the ground, constituted entirely by Indians, and the sweepers, the very lowest stratum of Indian society, the 'untouchables' who formed the very backbone of the sanitary system. Through the study of the staff employed for carrying out the measures at the sites, the thesis also sheds light on the manner in which the colonial state internalised existing social hierarchies

Above: Pilgrims in the Ganges. By W Nieuwenkamp.

of caste by reserving menial occupations for the lowest castes, and what impact this had on organised anti-caste struggles of the time. In this manner pilgrimage sites also acquired political significance as sites for the development and propagation of social as well as nationalistic movements. One of the aims of the thesis is to disaggregate the colonial state vertically and show that it was not a monolithic and unified structure. A study of the roles of the lower-level staff enables this and shows how implementation of policy was not a smooth top-down process but in fact one that was complex and contested at every level.

Finally, the thesis argues that the pilgrimage experience was altered significantly by the way the colonial state physically reconstituted pilgrimage sites in the name of public health. It suggests that over the course of the 19th century, such measures had an impact on the way sections of the Indian population viewed these sites; they came to see these locations not only as holy sites but also as contested spaces between the colonial state and the indigenous population, as well as between various sections of the Indian population.

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1 With the exception of Bhattacharya, Harrison and Worboys's 2005 study of vaccinators in British India, *Fractured States: Smallpox, public health and vaccination policy in British India, 1800–1947*.

'Let all come who by merit most deserve reward'

ANDREW SOMMERLAD

My research has considered the response of a leading academic institution, University College London (UCL), to the dismissal of scientists from German universities, 1933–38.

Two months after his ascension to Chancellorship, Adolf Hitler formalised legislation for the dismissal of any persons of 'non-Aryan' descent or threatening political opinion from any branch of the civil service, which included Germany's state-run universities. Thus approximately 2000 academic and research workers were removed from their posts with no prospect of their gaining further employment.

Within Britain, a response was seen quickly. Organisations were established to raise funds and provide academic work for the dismissed scientists. The best-known of these was the Academic Assistance Council (AAC, now operating as the Council for Assisting Refugee Academics). However, in order to do this, they needed the cooperation of the universities of Britain and other countries around the world. UCL was at this time the largest university in London and possessed, in its Provost Allen Mawer and physiology professor A V Hill, some of the key players in the establishment of the AAC, and so was ideally placed to promote the acceptance of displaced scholars.

Numerous triumphalist historiographies have been written since World War II lauding the efforts of the British men and institutions that did so much

to strengthen British science by coordinating efforts to 'rescue' some of these scientists and offer them refuge in British organisations. However, these have tended to focus on the achievements of the émigré scientists, which were indeed impressive – 20 Nobel Prizes – rather than the processes that facilitated their migration. This discourse of 'loss' and 'gain' has limited historical value.

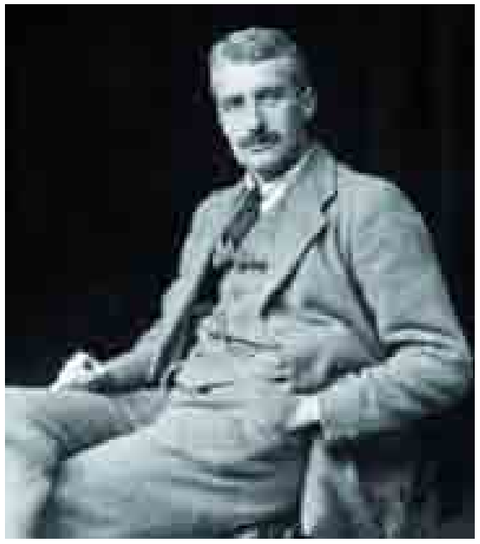
My research for a dissertation on this subject instead aimed to investigate the contribution of one university to the British response during the 1930s in order to better understand the political, social and intellectual atmosphere of the time. I utilised the seldom-used UCL records of this time to investigate the scale of UCL's efforts, the organisational and logistical structure of these efforts, and the motives behind them. A comparative study of the actions of the London School of Economics (LSE) was also used to indicate something of the wider intellectual context in which the university acted.

Following a call for assistance from the AAC, the LSE established in May 1933 an Academic Freedom Fund to which all its teachers were invited to contribute. This initiative raised £2849 in three years, which was then distributed as financial aid to those academics in need. This action represented a significant statement that the LSE would take a lead among the universities of Britain in the response to the crisis. UCL, meanwhile, had established a committee comprising nine university professors to consider what practical assistance could be offered. A fund similar to the LSE's was proposed, but the committee vetoed this when it met in June 1933 in favour of a less involved approach. Wary of placing undue burden on the university's resources and limiting job opportunities for British scientists in a 1930s Britain with a 25 per cent unemployment rate, UCL ruled out offering permanent places to German scholars but would instead allow short-term placements to academics 'of established position'. There was to be no tacit expression of perverse collaboration with Germany's policy by eagerly accepting the scientists when rhetoric of a 'Jewish betrayal' was already being presented as justification.

It is clear that the main impetus for the influx of German scientists to UCL came from individual professors. A V Hill found a place in his laboratory for a young Bernard Katz (who would go on to win a Nobel Prize for his work on the storage and release of neurotransmitters), while J B S Haldane, Professor of Genetics, assisted Ernst Chain (who was also later awarded a Nobel Prize for his work with Howard Florey in the isolation, purification and production of the antimicrobial agent penicillin).

About 100 refugee scientists could be found at UCL during 1933–38 – which, in the context of the 78 000 refugees whom Britain took in between 1933 and September 1939, was not a large-scale acceptance. In fact, UCL's careful selection of the most talented or promising scientists makes the response appear more like selective immigration than the wholesale rescue of which many historians have spoken.

While we find the official response rather guarded, the experiences of those who did find a place in UCL were positive owing to the welcoming attitude they found among the scientists there. The history of assistance and openness, and the environment that they found when they arrived (in many cases contrasting strongly with the turbulent university environment in Germany), were appealing. Many of the dismissed Jewish scholars describe feeling isolated – with little support from their retained colleagues. However, the solidarity that was provided to these individuals by the action of UCL academics was very important. UCL was often not the final resting place (academically speaking) for the dismissed scholars, who moved to other universities within Britain and abroad, but what UCL was able to provide even to these individuals was a continuity of work and academic life that had great significance, both individually and eventually for the wider medical world.



Right: UCL's Professor A V Hill, *c.*1925.

I recently attended a meeting at UCL discussing the plight of academics in Iraq, where sectarian violence and a breakdown in security has led to more than 250 being assassinated and many more feeling forced to flee to safer environs. This threatens to further delay the reconstruction of a society that has suffered years of dictatorial rule and violence. While any action to assist the Iraqi academics must avoid worsening the 'brain drain' that has already begun, we can certainly learn something from the lessons of the 1930s and act swiftly to assist those academics who wish to remain in Iraq and those who wish to seek refuge elsewhere.

Andrew Sommerlad is a medical student at University College London. The title of this piece is the English translation of UCL's official motto: *'Cuncti adsint meritaeque expectent praemia palmae.'*

Sanskrit gynaecologies

MARTHA ANN SELBY

It is the goal of my book project, currently titled *Sanskrit Gynecologies: The semiotics of gender and femininity in early Sanskrit medical literature*, to uncover what have necessarily been 'masculine' as well as 'Sanskritic' views of what embodied female experience might have entailed within different medical contexts.

Inspired by Stephanie Jamison's work on the roles and positions of women in Vedic texts, I see it as my task to uncover and discuss what Jamison has termed the "conceptual position" of women in early Ayurvedic literature: as objects of practice, but also as medical "actors" in and of themselves. This task has not been an easy one by any means. Jamison writes that in the Vedic context, the materials that we must necessarily confront are "texts preserved by men for men as the foundation and support for an elaborate, well-organized, institutionalized religious system. How can we even hope to glimpse women's experience in these structures, and if we do glimpse something, how can we tell what it represents? We must make the texts tell us things that their composers did not think they were saying; we must read between the lines."

Luckily, such a reading is easier to carry out in the written records of early Ayurveda. There is simply more material to work with that directly describes and addresses specific medical concerns of women. Also, Ayurvedic texts were a part of a larger cultural world: they share information and attitudes with other Sanskrit textual genres, particularly with *dharma-sastras* (legal treatises), especially when the subjects in question turn to women and the regulation of their bodies in times of ritual pollution and reproductivity, described by Jamison as "areas of anxiety" about women and their "fickleness or constancy, their 'untruth' or fidelity, their weakness or power, their stupidity or intelligence…[T]he texts in general provide a set of meditations…with figures, narrative patterns, and religious procedures that affirm one or the other of the polarities of the attitude in question."

These "areas of anxiety" that Jamison has identified are also evident, even clearly demarcated, in early medical literature, but I would further suggest that much of the material that these texts present to us on subjects concerning women's bodies – particularly in the realms of gynaecological maladies, in the treatment of the pregnant body, in descriptions of the gestational process, of birth experiences, and even in a matter as simple and as basic as anatomical difference – must have been compiled with the collusion and help of women. Although there is no evidence of actual dialogue, or of what we might even remotely call a 'case history', it can only stand to reason that women must have played an active role in the production of medical knowledge, especially in matters that were of direct and special concern to them. As Lesley Ann Dean-Jones has written in her 1994 book *Women's Bodies in Classical Greek Science*, "[t]heories of female physiology…presumably received some input from women, so scientific texts concerned with women's bodies could be doubly useful in revealing how men in antiquity regarded women and how women regarded themselves."

Although the Ayurvedic corpus was beyond a doubt written and shaped by men, we can also uncover their assumptions about the women on whose illnesses and experiences they were writing. Dean-Jones writes that just as "a society expresses its attitude towards the female body, as it does towards other phenomena of the natural world, in myths, superstitions, and folk remedies", so do we find these attitudes in literature that we might characterise as "rational", "scientific" or "logical" in its formulations. As Dean-Jones notes, "cultural assumptions play a part in shaping the scientific explanation of an event, and this can result in theories which seem to us as fantastic as the mythological conjectures they were meant to replace."

Right: Shiva, attended by women. Ink, 1907.

But Ayurvedic literature in no way replaces mythological conjecture with scientific observation and explanation: the two go hand in hand, and it is, in fact, quite impossible to understand the ways in which Ayurvedic literature is arranged (and how diseases are taxonomised) unless one knows the myths on the origins of illness, upon which aetiological narratives are ultimately patterned. In turn, these determine and regulate the order in which diseases are presented and discussed in the texts.

Among Sanskrit medical works, there are no 'gynaecological texts' *per se*, but, as in the Aristotelian corpus, "sexual differences are dealt with as they arise" as Dean-Jones remarks. As P V Tewari has noted, "the importance of [the male child] and the absence of female physicians were probably the twin reasons for rather a brief description of gynaecologic entities in the texts". This remark, though, is definitely troubled by her own work, in which she has combed through a number of Sanskrit Ayurvedic classics for gynaecological and obstetric information, and, in effect, has constructed veritable and very useful 'handbooks' on these subjects. Tewari described her method as a recapitulation of textual description, supplemented by her own commentary, "wherein [an] attempt has been made to give intelligible explanations on the basis of [the] subject[s] available in books of modern medicine or scientific logics, but without transgressing the limits of descriptions of *Ayurvedika* classics".

It can only stand to reason that women must have played an active role in the production of medical knowledge

Tewari's agendas of identification and classification are somewhat similar to my own. In my own rewriting of the two earliest Ayurvedic texts, the compendia of *Caraka* and *Susruta*, I have developed my own idiosyncratic processes of coding, cutting and pasting materials in order to assemble them under my own complex headings for comparison and analysis. Tewari and I part company, however, at a number of levels. Her insistence, for instance, on the use and imposition of modern medical terms – by definitively claiming that a gynaecological disorder termed *rakta-gulma* (a tumour caused by vitiated blood) in the texts is analogous to "molar pregnancy", for example – does not really help us come to terms with *rakta-gulma* within its own realms of textual and descriptive logics, or, needless to say, as a product of historically specific social and cultural factors that arise in the discussions of the aetiology, course and treatment of this disease.

In addition to retrieving information on what could be labelled as 'gynaecological' or 'obstetric', I have also collected every single passage in which women are mentioned, even in the most offhand of ways. I am examining how gender issues are embedded in grammar – how we encounter them in the texts at meaningful linguistic levels – but I have also found what we might call attitudinal nuances that are missed if we are just looking for diseases and passages that relate strictly to issues of women's health. In other words, my goal is to describe the medical world that women inhabited, amounting to a recovery and reconstruction of female experience through a careful gleaning of the textual record. What I hope to accomplish is to move Ayurvedic texts into "the integrated domain of cultural history", as Kumkum Sangari and Sudesh Vaid have written, and out of the merely descriptive philological realm. I have chosen instead to operate in the realm of an engaged, analytical philology, which begins with close readings of texts and ends in bringing these rich materials into broader conversations with larger social and historical institutions and constructions.

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New publication

Refiguring Unani Tibb: Plural healing in late colonial India by Guy Attewell.

This work examines the ways in which unani tibb reconstituted its identity in the light of modernising trends at the turn of the 20th century in India. It brings out the heterogeneity of unani tibb in late colonial India that frequently defies its commonly ascribed label as a 'traditional Muslim system' of medicine. Through an analysis of interconnecting themes, Guy Attewell draws attention to the tensions manifest in different spheres of unani activity as practitioners reconfigured their knowledge and practices through the prisms of biomedical concepts, language, nationalist and communitarian politics, changing social and moral norms, and colonial-inspired models of legitimacy.

The book shows that while tibb has always been a cosmopolitan profession, the late 19th and 20th centuries saw a fundamental transition from a principally localised, personalised practice to one that had to engage and be represented in a mass, public arena for status, recognition and custom. This transition, the book argues, was neither complete nor uniform. The study draws on a range of material in Urdu, Arabic and Persian, including texts, pamphlets and journals, in addition to archival records in Hyderabad and London, to draw out the complexity and contingency in the evolution of a plural and extraordinarily dynamic tradition of healing.

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For purchase in the UK and Europe, contact Anthony de Souza (**E** sangambooksuk@gmail.com); for the rest of the world, contact Orient Longman Private Limited (**E** info@orientlongman.com).

All sources great and small: animals and 'one medicine'

ANDREW GARDINER

Medical history is very anthropocentric. Animals, their diseases and those who have treated them receive scant coverage in the literature. Yet animal disease is an interesting and diverse field with links to many other areas, both within and beyond medicine. Such diversity raises important and interesting questions: historical, social/cultural, political, economic and ethical.

Medical research has frequently concerned itself with animals. The concept of a true 'one medicine' encompassing clinical practices and comparative approaches to natural disease had a brief flowering in the 19th and early 20th centuries. It then rapidly morphed into an experimental and laboratory medicine of artificially constructed disease. Treatments and technologies worked out in experimental animal models were often eventually used in clinical veterinary patients, having, as it were, proved their worth in human medicine – a curious reversal of the originating process.

It does now seem as if a type of genuine 'one medicine' may be coming back into fashion, facilitated by the genomic revolution and interest in aetiological complexity, especially in relation to the role of genes and environment. Previously, this was exactly the kind of messy complexity that laboratory researchers sought to exclude by working hard to standardise certain animals (especially rodents, but dogs too) as research 'tools'. Naturally sick animals were not allowed into the picture: in fact, huge pains were taken to exclude them as gnotobiotes and specific pathogen-free laboratory strains were developed.

Now, real-world complexity in the causation of disease may be coming within reach as a new range of molecular technologies becomes available. The most exciting clinical area currently is oncology. Animals suffer from a wide variety of natural tumours (one in three dogs develops cancer at some point in its life). Some of these cancers are analogous to those of humans. Animals, being shorter-lived than us, show faster progression of disease (and therefore faster responses to successful treatment). Companion animals share the human living environment along with its known and unknown carcinogens. Their disease is messy and real, just like our own.

Views on cancer fundamentals are changing. Historically, once it was just the 'big C', the generic term of dread; then there were its various manifestations and behaviours in different body systems and tissues; then environmental causes and triggers; now familial genetic predispositions. In the future it may well be a case of 'your own private neoplasia'. At a cellular level, if cancer is a true stem cell disease caused by a small population of primitive and aberrant cells, therapeutically resistant, then the implications for how the disease should be approached are different. Up till now, it has been the daughter cells, the disseminating and symptom-causing offspring, that have received all the attention. New ideas on causation may be best pursued with extensive comparative studies of natural disease, both within and between species of cancer-suffering animal. Veterinary cancer therapy is a developing area, and there are already some formal and informal links between medical and veterinary oncologists.

Right: Apothecary giving medicine to a dog. Coloured engraving, 18th century.

In some senses, it is 'one medicine' already: many areas of clinical veterinary medicine are now analogous to human medicine. However veterinary medicine is, for the most part, a form of private medicine (supplemented for the poor by various veterinary charities and a sizeable 'bad debt' burden carried in most private practices). The private nature of veterinary practice often means that dogs get their cataract operations and hip replacements faster than human animals get theirs on the NHS.

That may seem a deplorable situation, especially when one considers the level of primary care available to humans in poor countries. However, spending choices made by individuals at 'the point of sale' seem far

removed from macroeconomics and global politics. Put in the context of new car/holiday/clothes/antique vs your cat's complex fracture operation, attending to the needs of a sentient being (for which you have assumed full responsibility) perhaps seems less trivial.

Right: Private veterinary treatment is often faster than human NHS treatment.
Caroline Gunn

For most animal owners the choice at any rate is an easy one. There are however a range of additional ethical and welfare-associated questions surrounding animal treatment: which animals benefit, when it should start (and stop), whose interests are being promoted (animal, owner, veterinarian) and so on.

In the new renaissance of 'one medicine' approaches to disease, historians of the future might seek a longer perspective on animals in medicine: their medicine, our medicine, both together. It would be a pity if those future researchers had as few secondary sources to consult as I have!

Andrew Gardiner is a doctoral student at the Centre for the History of Science, Technology and Medicine and the Wellcome Unit for the History of Medicine, University of Manchester.

Glasgow Centre for the History of Medicine

MALCOLM NICOLSON

The Centre for the History of Medicine at the University of Glasgow was founded, as a Wellcome Unit, in 1985. David Hamilton was Director and Marguerite Dupree and Stephen Jacyna were core staff research fellows. More than 20 years later Marguerite is still there, now Professor Dupree. Much else has changed in the meantime but the commitment to being a major focus for the history of medicine in Scotland remains.

In July 2001, Professor Anne Crowther assumed the directorship of the Centre. She took over from Johanna Geyer-Kordesch, David Hamilton's successor. The circumstances under which Anne assumed the post were hardly auspicious, given the Centre's recent loss of Wellcome Unit status and a number of other difficulties. Anne accomplished that most challenging of administrative and leadership tasks, the management of relative decline, with exemplary tact, determination and integrity. Gradually the Centre recovered its equilibrium and its morale, and grant income began again to flow in its direction. From the Wellcome Trust, Anne secured a programme grant, a University Award (for Dr Rosemary Elliot) and an Enhancement Award – remarkable successes in so short a time. It is largely owing to her endeavours and her leadership that the Centre is now fully revived and active in research and teaching. Anne took early retirement in April 2006 and the occasion was marked by several celebrations, including a special joint seminar with our host Department, Economic and Social History, which was very well attended.

Anne's retirement has, however (so far at least), been merely nominal. She has accepted an appointment as Senior Research Fellow to the Centre and, freed of the burdens of teaching and administration, continues to be active in research and research leadership, on several fronts. Her latest book, *Medical Lives in the Age of Surgical Revolution*, written jointly with Marguerite Dupree, appeared early in 2007. A collective biography of 2000 medical students matriculating at Glasgow and Edinburgh universities between 1865 and 1874, the book provides new insights into the transmission of Joseph Lister's surgical ideas, emphasising his students' key role implementing his ideas in practice and highlighting Lister's role as a medical 'hero'. *Medical Lives* shows the importance of medical networks originating at university and contributes a new view of Sophia Jex-Blake and the first women medical students at Edinburgh. More generally, it explores the social origins, education and careers of a group who did much to remake the medical profession in a significant period in its development in Scotland, Britain and the wider world. Anne also continues to work on an official history of the Royal College of Nursing, with Susan McGann, archivist of the College, and Rona Dougall, formerly a research assistant in the Centre.

In May 2006, I took over as Director. Having looked at the pattern of the development of the subject elsewhere in Britain, I took the decision to move away from the old Unit model upon which the Centre had been formed and to reconstitute the Centre to include, as full members, all the staff of the University's School of History who were active in history of medicine research. This has brought into the Centre two very distinguished scholars, Professor Sam Cohn and Professor Simon Newman, strengthening our research profile considerably. Sam is the author of, among much else, *The Black Death and the Transformation of the West* (1997). Simon's book, *Embodied History: The lives of the poor in early Philadelphia* (2003), won the American Studies Network Book Prize in April 2004, as the most "remarkable book published in the field of American Studies".

Above: The Royal Hospital for Sick Children, Edinburgh. By John Dixon Comrie, 1932. Infant health in 20th-century Scotland is a major research focus for the Glasgow Centre.

Much of the Centre's research effort currently revolves around the development of the themes of our Wellcome Trust Enhancement Award. Received in 2004, the grant supported a project entitled 'Infant Health in Twentieth-century Scotland', headed jointly by Marguerite, Anne, Professor Lawrence T Weaver and me. Lawrence is Samson Gemmell Professor of Child Health, a Senior Research Fellow of the Centre, and a former holder of a Wellcome Trust Research Leave Award. His current research involves an exploration of the ways in which an understanding of the history of nutrition can inform current thinking on infant feeding. The Enhancement Award thus represents a major cooperation between the Centre and Professor Weaver's Department of Child Health (based at Yorkhill Hospital in Glasgow).
The monies have allowed the employment of Dr Angus Ferguson, who had recently completed his PhD in the Centre, to work initially under the direction of Lawrence and myself on infant nutrition in Glasgow in the early 20th century. A joint paper, 'The Glasgow Corporation Milk Depot 1904–1910 and its Role in Infant Welfare: An end or a means?', has recently appeared in *Social History of Medicine*. In late 2006, Angus transferred to work with Marguerite and Anne on the history of sudden infant death syndrome. Ms Rachel McAdams was recruited from the Wellcome Unit for the History of Medicine in Manchester to conduct doctoral research on the theory and practice of neonatal resuscitation since World War II.

The preliminary results of the investigations funded from the Enhancement Award have been presented in several venues and formats, and publications have also begun to flow. A noteworthy aspect of this process of dissemination was the holding of a two-day meeting on the history of fetal and infant health, and related issues, in the Centre in September 2006. The meeting attracted a capacity audience and was very successful in publicising the Centre's work in this area and allowing liaison with scholars from other institutions who are working in similar fields.

Our Wellcome Trust programme grant is entitled 'The Scottish Way of Birth and Death', and is headed by Anne Crowther, working with Dr Anne Cameron and, up until December 2006, Dr Gayle Davis. The research examines the extensive records of the Registrar General for Scotland from the mid-19th century, as they relate to issues of health and medicine. A study of how these statistics are compiled, and the policies behind them, sheds much light not only on the problems of demography but also on the social influences behind the statistics. The inability of the Scots and English to agree on death registration during the 19th century throws further light on the contemporary contagion/miasma debate.

Marguerite Dupree continues her research on regional variation in the NHS, 1948–74, and the nature and extent of integration among the parts of the tripartite structure of the service. Rosemary Elliot took up her Wellcome Trust University Award in October 2004. This provides funding for her research project on 'Smoking and Health in Germany from Occupation to Re-unification (1945–1995)'. Her book *Women and Smoking Since 1890* will be published shortly by Routledge. I continue my work on 19th- and 20th-century biomedical science, with an especial emphasis on diagnostic practice. As well as working on the Enhancement Grant, Angus Ferguson continues his work on the history of medical ethics. A total of ten doctoral students are attached to the Centre, ensuring an active research culture among the younger scholars. Three of our students are supported by the Trust and two by the Economic and Social Research Council. Their areas of study range include missionary medicine, R D Laing, 19th- and early 20th-century obstetrics, the early history of the NHS in Scotland, and the history of domiciliary care in Glasgow.

All in all, the Centre enters its third decade in good heart, active in both research and teaching

The Centre hosts an active programme of seminars and workshops. The former are intended for formal presentations of work that is well advanced; the latter provide a forum for postgraduates and others who wish to present work at an earlier stage of research.
In addition, every year we host the Wellcome Trust Regional Forum on the History of Medicine in Scotland. In 2006, this popular annual event was themed around the history of psychiatry in Scotland and attracted a capacity audience. On this occasion, the Centre was able to hold the Forum in its own premises, which gave us a welcome opportunity to show off the splendid facilities and architectural beauty of our new home, Lilybank House, into which we moved in September 2005.

We have also recently begun a programme of Witness Seminars, modelled upon the successful series run by Tilli Tansey in the Wellcome Trust Centre for the History of Medicine at UCL. Our first event, on 'The History of Domiciliary Care in Geriatric Medicine', took place in May 2007, and another event, on the history of old-age psychiatry, is planned for 2008.

The Centre continues to be active and innovative in teaching and curriculum development. We provide honours modules for the Department of Economic and Social History and make a substantial contribution to the teaching of the Graduate School of the Faculty of Law, Business and Social Science. We offer options for the Master's courses in the School of History and our Master's degree in 'History with Emphasis on the History of Medicine' attracts good-quality students every year. A special study module on the history of medicine is offered to second-year medical students and a contribution is made to the first-year medical curriculum.

All in all, the Centre enters its third decade in good heart, active in both research and teaching. We continue to receive excellent support from the University of Glasgow. We enjoy cordial links with the Centre for the History of Health, which is run jointly by Glasgow's other two Universities (Strathclyde and Glasgow Caledonian), and with historians of medicine in Edinburgh, Aberdeen and Stirling. We continue to aspire to be at the leading edge of the history of medicine in Scotland, and beyond.

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Representations of Early Modern Anatomy and the Human Body

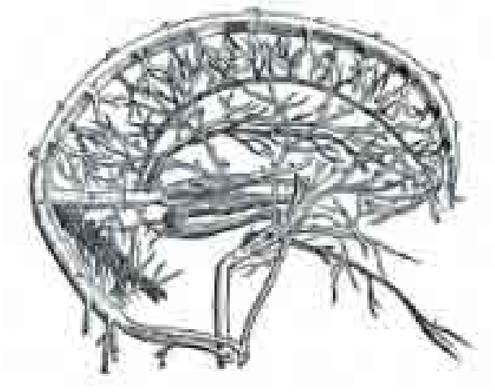
STEPHANIE EICHBERG

That the historical analysis of visual representations remains a vital and important field of enquiry was recently shown by the fourth Centre for the History of Medicine and Disease workshop at Durham University.

The one-day workshop, organised by Durham's Sebastian Pranghofer, discussed 'Representations of Early Modern Anatomy and the Human Body' and aimed at contributing to a better understanding of the body in its historical and cultural context. The focus was on visualisations of human bodies from the 16th to the 18th centuries as represented in anatomical textbooks, public dissections, private anatomical collections, and popular traditions and narratives. The speakers' papers were as varied as the interdisciplinary background of the audience, ranging from medicine, anthropology and archaeology to the history of medicine and visual culture studies. The workshop was held on 22 June 2007 at the Wolfson Research Institute, Queen's Campus, and was sponsored by the Wellcome Trust.

The first session examined the cultural context and significance of early modern anatomy. Rina Knoeff (Leiden University) used stories of early 18th-century Dutch women, who believed that they had animals living inside their bodies causing their illness, to show how early modern people actually experienced and imagined the otherwise invisible inner workings of their bodies. Knoeff's paper placed these early modern phenomena in the specific cultural and political context of the early 18th-century Dutch Republic in which the material body and wealth of the nation was equally threatened by 'little animals' (pile worms) attacking and destroying dikes and houses. Simon Chaplin (Royal College of Surgeons of England) provided a fresh perspective on early modern anatomy with his paper on 'Exemplary Bodies: Public and private dissections in Georgian London'. He compared the public dissections of convicted criminals at the Surgeon's Hall from 1752 onwards with the privately conducted post-mortem dissections of wealthy patients by surgeon-anatomists such as William and John Hunter. Chaplin linked these two kinds of 'exemplary bodies' to the opposing conceptions of public and private and their inherent implications for the establishment of medical authority in 18th-century London.

The second session examined the construction and representation of anatomical knowledge. In 'The Visual Representation of the *rete mirabile* in Early Modern Anatomy', Sebastian Pranghofer showed how debates over the existence of the *rete mirabile* did not just reflect the absence of a consistent iconography. Its uncertain



Right: Arteries in the brain. By Andreas Vesalius, 1543.

anatomical status mediated the equally ambiguous status of the human body at the time. Sachiko Kusukawa's (Trinity College, Cambridge) paper on 'Andreas Vesalius and the Canonisation of the Human Body' analysed the interrelation between images, texts and objects in Vesalius's *De humani corporis fabrica* (1543). She demonstrated how Renaissance scholars positioned themselves in the Galenic tradition while at the same time directing the reader's gaze towards their own understanding and interpretation of the idealised human body.

Above: Dissecting a cadaver. Mezzotint, after Rembrandt van Rijn.

Right: Plate showing human muscles. By Andreas Vesalius, 1555.

The last session focused on gender, history and the representation of the anatomical body. The paper by Roberta McGrath (Napier University, Edinburgh), 'We Have Never Been Modern', located the changing visual conceptions of the female body in anatomical illustrations of early modern obstetrics. She concluded by linking these to the development of our 'post-industrial reproductive biotechnology', in which the female body has become a mere object, detached from the fetus and human reproduction as such.

The closing discussion summarised the common thread of all papers: the methodological issues related to investigating visual representations of the human body. It was argued that the relation between texts and images in particular and the specific historical context of visual images in general deserved more attention. Images, especially, were conceived as agents shaping experiences: because of their ability to direct the eye of the beholder, they either changed or confirmed preconceived concepts and notions of the body. Another outcome of the workshop was that greater attention should be given to the engagement of researchers and historians themselves in bringing together images, texts and objects. Historians were often in danger of investigating texts and images as single units, thus adding to the process of separating them and/or taking them out of their respective contexts. An overall emphasis was placed on the importance of historical and cultural contextualisation and on the significance of interdisciplinarity for achieving a better understanding of the human body in context.

This insightful workshop raised many fascinating issues, not only for medical historians. The subjects of the papers fostered lively discussions that, owing to the various backgrounds of the participants, added fresh perspectives to the historical themes.

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A Voice for Mothers: The Plunket Society and infant welfare 1907–2000

NAMRATA R GANNERI

Women have been the primary providers of 'caring labour' – particularly to the young – for centuries and across civilisations. At times, women turn this role into a mission and voluntary associations such as the famed Royal New Zealand Plunket Society are born. *A Voice for Mothers* is a triumphalist narrative of Plunket – the premier 'voice' on infant welfare for generations of New Zealanders.

Plunket's significance in the health system of New Zealand during the first half of the 20th century was reaffirmed by a historical fact: the lowest rate of infant mortality in the 'white' world. Despite the absence of historical consensus over the significance of Plunket services in this achievement, this model of volunteers working in tandem with health professionals to offer free services in childcare seems to have become emblematic of the 'New Zealand way of life'.

In the early 20th century, concerns about infant health, however, were part of the larger discourse on 'national efficiency', the paranoia to sustain a white majority amid threats of submergence from the fast-proliferating Asian and Maori population. Plunket was founded to give 'correct' advice to mothers on feeding practices, nutrition and 'scientific' methods of child rearing. While professionalisation of care was one facet of this initiative, another was the birth of the disciplines of paediatrics and child psychology. Significantly, a psychiatrist, Dr Frederic Truby King, was instrumental in institutionalising the Plunket system.

A hierarchy of experts in infant care was set up, with the mother at the bottom of the pyramid. The Plunket nurses themselves were subordinate not only to paediatricians but even to local doctors. Indeed, considering the cultural authority enjoyed by the medical profession, nurses were specifically advised not to alienate doctors. Plunket nurses dealt in 'preventative medicine' and treatment of ailments was left to doctors; the neatness in division of labour allayed doctors' fears about their practices. Linda Bryder does not critique the mechanics of production of knowledge, neither does she interrogate the constitution of the medical profession. Terms such as 'medical establishment' and 'medical profession' give the impression of being monoliths undifferentiated by gender or class. Curiously, the voices of nurses trained by the Health Department – the district nurses who looked after the health of non-European infants, vital to the story – are largely absent.

Bryder argues that Plunket thrived due to considerable political support in its early years; in fact, wives of the men of power and wealth patronised it. The society incidentally gets its name from Lady Victoria Plunket, wife of the Governor of New Zealand in 1908. Plunket claimed state funds as a right and simultaneously warded off state intervention, something that often resulted in friction with the Health Department. This resonates with the classic feminist dilemma where women seek support from the state through legislative changes and welfare schemes while locking horns with its authoritarianism and patriarchal oppression at another level. Bryder declares that the Plunket women retained their autonomy – unlike the US women who conceded their movement to paediatricians or those who submitted to a government takeover in the UK.

In this monograph an influential critique of the Plunket method that principally emanated from Erik Olssen is refuted. Olssen characterised the Plunket nurse as imposing her childcare regimen (routines in feeding, sleeping and bowel movements) on hapless mothers to produce disciplined citizens. Collating evidence from the 1920s and 1930s, Bryder demonstrates that mothers were not reluctant recipients of the 'Plunket dogma'; actually, there was no such thing. Nurses themselves were not doctrinaire in following Plunket schedules and mothers used their discretion in accepting Plunket advice. Women, rather than being passive subjects, were active agents embracing the child-rearing strategies offered. Remarkably, today – when women make active choices regarding motherhood *per se* and parents can choose the kind of support they offer to their young ones – it is but natural that the profile of a Plunket nurse is of a 'friend and facilitator' rather than that of 'expert' on parentcraft.

Tracing the history of a dynamic institution over a century-long period and disentangling issues from accompanying complexity is a demanding ask. Bryder has tapped a variety of historical records and produced a text that is virtually a visual delight, with its reproduction of photographs, cartoons and newspaper clippings. Bryder's agenda of documenting Plunket's changing relationship with the government and paediatricians proceeds admirably till the 1970s; thereafter, the delineation is rather cloudy. Similarly, Bryder refrains from an elaborate commentary on challenges to Plunket philosophy, particularly from feminists who challenged biological determinism. Nourished on the ideology of 'maternalist welfare', Plunket had advocated full-time motherhood and carved out gender-defined public roles for women, which naturally was at odds with the 'new' woman. It also emerges that Plunket adopted a conservative stance on contraception, abortion and family planning. The final theme of Bryder's book, the relations between nurses and mothers, assumes even more complex contours in the case of Maori owing to the cultural distance between white nurses and Maori mothers. Did Plunket reinvent itself as a 'women's movement' then? Moreover, in my opinion, Bryder reiterates the Plunket self-representation as a 'society run by women for women' rather uncritically.

Many interesting questions accost us in our journey into the world of Plunket: the content of Plunket's mothercraft manuals in their many versions, the creation of the Plunket logo, the fundraising campaigns, the changing profile of nurses and so on. Now that Bryder has identified a range of sources, another monograph on the politics of infant health is eagerly awaited.

Bryder L. A Voice for Mothers: The Plunket Society and infant welfare 1907–2000. Auckland: Auckland University Press; 2003.

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75 Books from the Osler Library

KATRINA GATLEY

This is a collection of crisp reviews, 75 in all, mostly of books, to mark the inauguration of the Library for the William Osler (1849–1919) collection at McGill University in 1929. Edited by Faith Wallis and Pamela Miller, the focus of this publication is the Library and its collection.

The nature of the man, William Osler, is but touched upon. The reviews by 30 "Library's habitués", to use Wallis's term, serve to demonstrate, collectively, the *raison d'être* of the Library – its use – and so make the case for its continuity.

This volume has aesthetic appeal. The quality of the reproduction of the source materials that partner each review is excellent. One can comfortably read the source material text, and the images from Robert Carswell's *Pathological Anatomy: Illustrations of the elementary forms of disease* (1838) give the sense of depth, intricate detail and vibrancy of the colour as found in the original lithographs.

The structure of the book is modelled upon Osler's concept for his collection. A sense of continuity perfuses the publication as the reader is presented with works grouped by themes: for example, 'The Shoulders of Giants', 'The Art of Healing' and 'The Fabric of Society'. This collection appears unapologetically whiggish, reflecting *Bibliotheca Prima*, Osler's prime list of men who made contributions of importance to the advancement of science. The familiar names (Hippocrates, Aristotle, Galen, Avicenna and so on) dominate. The range of material held by the Library is indicated by pieces that address, for example, Hermann Boerhaave's *Botanical Field Notebook* (1711–26), William Hamilton's account of the active volcanoes of the two Sicilies in 1776 and Abraham Flexner's report into medical education to the Carnegie Foundation in 1910.

In a few concise paragraphs contributors, mostly physician-historians and historians, contextualise their chosen material as well as their interest in and the value of the material. Anecdotes add the human factor, such as that recounted by Richard Golden of Osler to his wife-to-be as he tossed *The Principles and Practice of Medicine* to her: "There take the darn thing; now what are you going to do with the man?" So too does Wallis's description of Pliny the Elder's *Naturalis historia*: "This incunabulum boasts exquisite hand-painted decoration"; because of the quality of the accompanying photograph you can share in her enthusiasm. Although the authors naturally vary in style this is not disruptive. Wallis as the main contributor maintains continuity, as does the useful cross-referencing between entries. Interesting and useful too is the list of contributors with their respective areas of expertise and academic affiliations.

The purpose of this publication is to evidence the life of the Osler Library through the people who currently study there. In this it is successful. Confidently and beautifully, this publication proudly proclaims the Library a vital place.

Wallis F, Miller P (eds). 75 Books from the Osler Library. Montréal: Osler Library of the History of Medicine, McGill University; 2004.

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Childbirth and the Display of Authority in Early Modern France

KAREN M BUCKLE

In *Childbirth and the Display of Authority in Early Modern France* Lianne McTavish analyses the negotiations and representations of knowledge, credibility and experience of female and male midwives in France between 1550 and 1730, and highlights the differing ways in which textual and visual claims in obstetrical treatises can be read.

There is a wealth of historical scholarship on early modern childbirth, from Adrian Wilson's analyses of the rise of the man-midwife in England to more continental approaches undertaken by Ulinka Rublack. Into this mix comes McTavish's analysis of the display of authority in childbirth for the neglected case of France, 1550 to 1730.

Rather than investigating the interplay of social, cultural and institutional factors in the rise of man-midwifery after the first decades of the 18th century, McTavish asks how male intervention in difficult births was constructed: "How did men ever appear to be skilled, trustworthy birth assistants at a time when women – equipped with an intimate experience of pregnancy and labour – were 'naturally' associated with childbirth?" McTavish finds her answer in what she argues was the intensely visual realm of the early modern birthing room. It was here – with the focus on looking and seeing, and being on display and subject to scrutiny as well as attempts to make visible the obscure and unseen – that McTavish situates the negotiation of authoritative knowledge in childbirth.

In the second chapter we are confronted with the 'visual politics' that surrounded childbirth and operated within the confines of the birthing chamber. The expectant mother might be visually examined, a practice that man-midwives often noted was limited by women's false or unnecessary modesty, but her gossips, midwife and other female attendants were also subject to a form of visual surveillance.

As McTavish stresses, women too looked at men's bodies in the birthing scene. Dress, behaviour and expressions all had implications for the reputation and authority of the male attendant. In her chapter on 'Reading the Midwife's Body' she undertakes a detailed analysis of the self-representation and the importance of appearance to Louise Bourgeois, midwife to Queen Marie de Medici. Here McTavish develops the body of the midwife as a medium of communication that could be used to verify skill.

This focus on the visual construction of authority yields a valuable warning against simplifying claims to knowledge and experience in childbirth along gender lines. McTavish overstates the case of a narrative of a gender war in existing literature – implying criticisms that cannot be levelled at many recent contributions. Nevertheless the author provides a nuanced account of the fluidity and instability of masculinity in the projection of the authority of the man-midwife, and a similar case for his female counterpart. Male claims of expertise were not solely based in 'superior' knowledge of female anatomy. This model, often seen as playing an increasing role in the disembodiment of women and childbirth, sat alongside male appropriation of female relatives' experiences. Further still, great emphasis was placed on the man-midwife's own physical and manual experiences and capabilities – a display of knowledge commonly associated with the female realm of labour.

Running throughout this book is an intense interest with the interplay of text and image, and the author considers the messages that could be construed from their juxtaposition. Arising from this analysis she stresses the frequent contradiction between the literal and textual: images of the floating fetus contrasted against descriptions of the cramped confines of the womb and difficulties this presented for manual manipulation. As a preoccupation underpinning many of McTavish's reflections upon the contradictions and flexibility of male and female representations of authority, a note of caution is required. While she shows astute and careful consideration of the production of authority in the visual politics of the birthing chamber, this is not so apparent for the specific practices of publishing in early modern Europe – where the insertion of images was often decided by those closest to hand for the printer, and so disjointed image and text was common in the published treatise. A clearer statement of the relation of these practices to the obstetrical treatises under question, and of the implications for readership, would have resolved this.

In sum, McTavish has made a stimulating contribution to the history of early modern childbirth. Her work extends the findings of existing literature into an earlier French context and crucially centralises the role of the visual in the construction of authority. This book shows that such an approach provides an interesting slant to questions in the field.

McTavish L. Childbirth and the Display of Authority in Early Modern France. Women and Gender in the Early Modern World series. Burlington, VT: Ashgate Publishing Company; 2005.

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Expunging Variola: The control and eradication of smallpox in India 1947–1977

SUSAN HEYDON

In 1951, just over half a million cases of smallpox – 52 per cent of the world's total – occurred in India. India, therefore, was crucial to the success of global efforts to eradicate this dreaded and devastating disease.

Expunging Variola is a detailed and wide-ranging case study of the final three decades of the control of smallpox and its eventual eradication from India. It continues the analysis substantially begun in Sanjoy Bhattacharya's previous work (with Mark Harrison and Michael Worboys), *Fractured States: Smallpox, public health and vaccination policy in British India, 1800–1947*.

Following a short introduction that outlines the disease, its challenges and Bhattacharya's approach, the book is divided into five chapters. The first two consider the period to the end of the 1950s. Despite the hopes and aspirations of the newly independent nation, many of the complex political and administrative structures examined in *Fractured States* survived the ending of colonial rule, and were extended and reformulated to remain central to efforts to control smallpox in India. Work went ahead much more slowly and unevenly than pledged. During the 1950s the World Health Organization (WHO) made repeated calls for the eradication of smallpox. Chapters three and four examine the "troubled and uneven expansion" of the Indian National Smallpox Eradication Programme during 1960–68 and the "tortuous advance" of the final phase, 1969–77. An integral part of the campaign throughout the period was the development of vaccine and its deployment, without which eradication would not have been possible. This is discussed in chapter five. An epilogue reflects on the book's conclusions and ends with the awful – but sadly now familiar – spectre of smallpox being reintroduced and used in global terrorism.

Policy making proved far easier than implementation and provides the book's central theme. Eradication was an achievement that many people had not thought possible. India was too vast, too diverse geographically, politically, demographically, economically and culturally – the array of arguments usually used to justify a policy's lack of success. Yet, on 23 April 1977 an international commission certified India free from smallpox. Previous accounts, whether in published WHO or Indian government reports, official histories or the memoirs of field workers, have rightly celebrated the enormous achievement, but have tended to oversimplify the sense of unity among those involved, overemphasise the contributions of organisations and individuals, and downplay the serious problems that faced the campaign. Using extensive unpublished sources Bhattacharya has analysed how success was achieved through the efforts of a complex array of international, national, state and district organisations using a range of immunisation and isolation strategies. Often campaign workers encountered hostility both from those they were trying to protect from the disease and also politicians and officials.

An equally important theme in the book – with significance beyond India – is the relationship between international bodies and their personnel and the countries in which they work. Although smallpox eradication is sometimes presented as a vertically organised campaign imposed on India from outside, Bhattacharya makes explicit how India accepted it and ran it largely on its own terms. Opportunities were taken at all levels of Indian administration to repeatedly remind WHO representatives of India's autonomy. As a result, WHO officials had to change strategies and were acutely aware that their goals would not be achieved without bureaucratic and political assistance from the highest levels. State- and district-level administrators were also not keen to be pushed around by international or central government personnel and so provided differing levels of support for plans. Policies developed at WHO headquarters in Geneva and Indian central government in Delhi had to be readapted continually to meet the complex array of local conditions throughout India.

A third theme again has wider implications. However important, smallpox was only one health issue facing the newly independent nation. With limited funds available internally, international sources of finance had their appeal. In practice, the smallpox eradication campaign had varied effects on the running of the wider health delivery system as it competed for finance and personnel, and claims about the detrimental loss of resources from other health work were often exaggerated and politically motivated.

This well-written book is a major contribution to the literature. Not only is it a national case study for smallpox eradication, but it also adds to the slowly growing scholarship on postwar international health issues. Its careful and wide-ranging historical analysis focusing on the complexities of policy implementation could also be read profitably by those involved in the making of international health policies.

Bhattacharya S. Expunging Variola: The control and eradication of smallpox in India 1947–1977. New Delhi: Orient Longman; 2006.

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